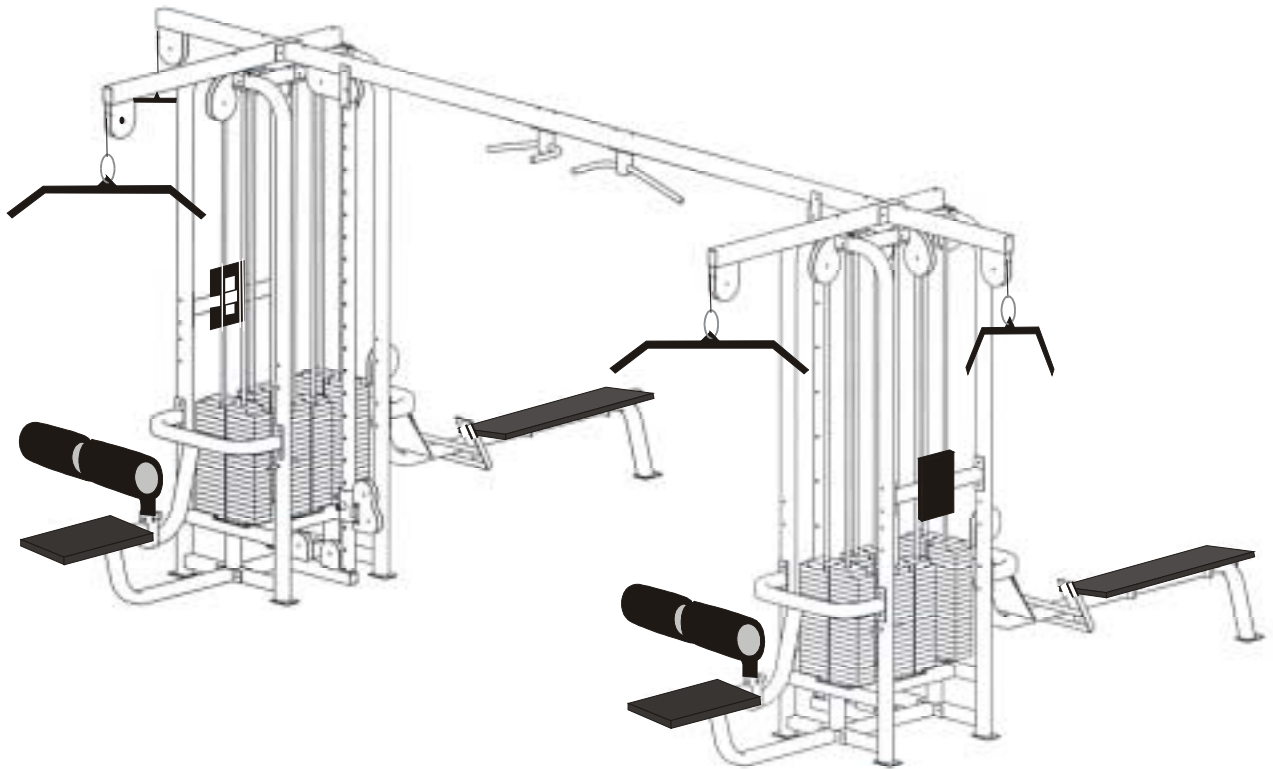




8 STACK MULTI-JUNGLE (SM81) WITH 2 ADJUSTABLE PULLEYS UNPACKING AND ASSEMBLY INSTRUCTIONS

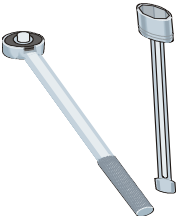


The SM81 comes partially assembled. Follow the steps below to complete the assembly.



WARNING: COMPONENTS OF THE SM81 ARE LARGE AND HEAVY. USE CAUTION WHEN ASSEMBLING THIS MACHINE.

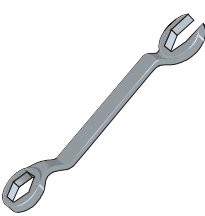
MATERIALS AND TOOLS REQUIRED FOR ASSEMBLY



1/2", 3/8", 5/8" & 9/16"
Socket wrench with extension



1/8"
hex key wrench



5/8" & 9/16"
Combination wrench



Pinch bar

You will also need a ladder and a piano dolly to lift and position the weight stacks.

ASSEMBLY TIME

Two people can accomplish this assembly in approximately 2-1/2 hours.

UNPACKING

Follow the steps below when unpacking the components of the SM81.

1. **Cut off the shipping wrapper.**
2. **Remove the parts boxes and shipping boards.**
3. Remove the items in the parts boxes. These items are shown in Figure 1.
 - A. Remove the bolts bag.
 - B. Remove the parts shown below. Parts that are used to build the SM81 are described in the section *HARDWARE* at the end of these instructions.



Figure 1. Parts box contents (box 1 on left, box 2 on right).

ASSEMBLY

Figure 2 shows an assembled SM81.

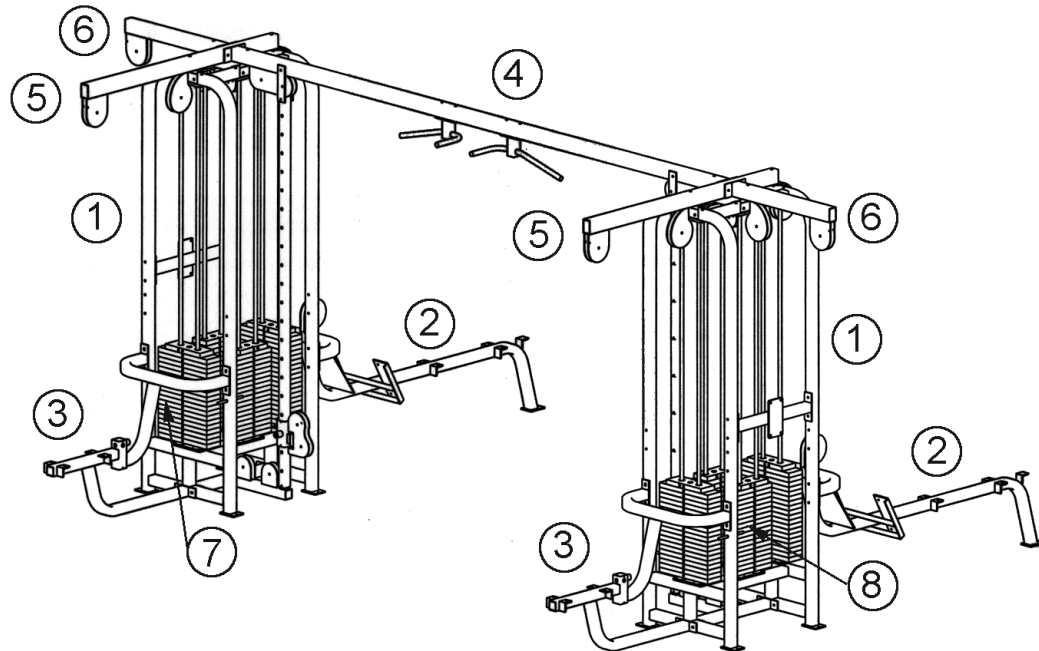


Figure 2. SM81 main components (seats and cables removed for clarity).

- | | |
|------------------------|------------------------------|
| 1. Cubes (2) | 5. Lat tops (2) |
| 2. Low row bench (2) | 6. Tricep top (2) |
| 3. Lat bench (2) | 7. 300 lb. Weight stacks (4) |
| 4. Connecting beam (1) | 8. 190 lb. Weight stacks (4) |

1. Place the two weight "cubes" in their "final resting spots." The cubes will be approximately 11'4" apart as shown in Figure 3.

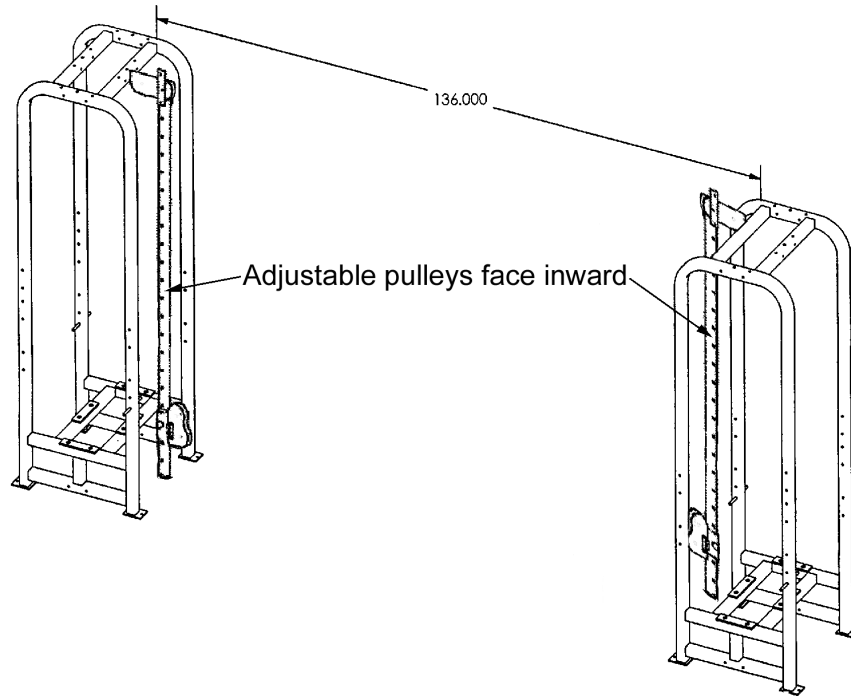


Figure 3. Set the weight stack cubes.

2. Bolt on the teardrop pulleys above the benches (see Figure 4) on both cubes using two 3/8" x 2-3/4" hex head bolts (used to bolt the cross beam to the cross members and the adjustable pulley tops to the top beams). Include the 3/8" flat washer, end cap washers, end caps and 3/8" Nyloc (locknut). Use the bolt configuration shown in Figure 5. You may wish to use a pinch bar to align the bolt holes.

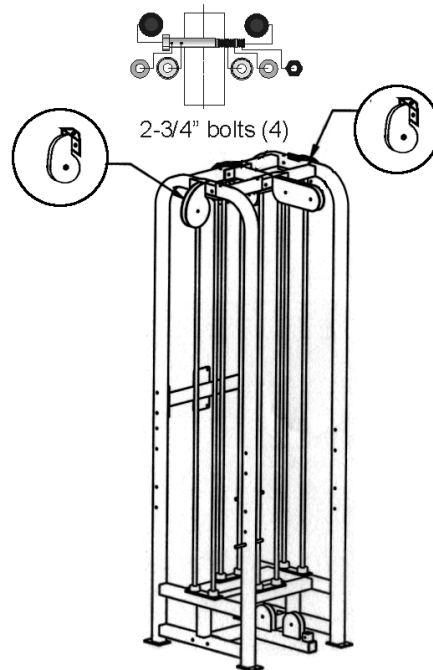


Figure 4. Bolt on the teardrop pulleys.

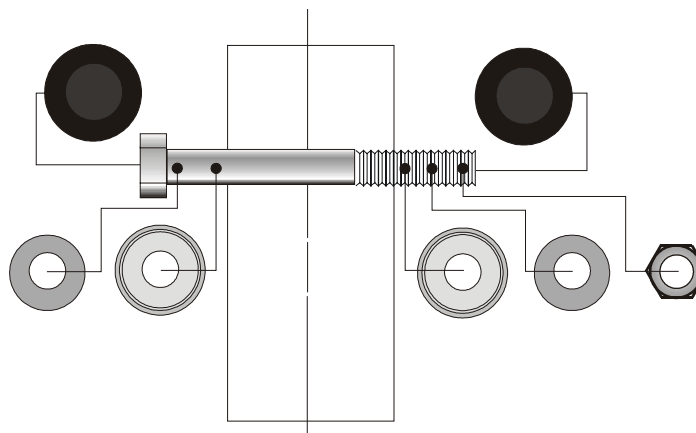


Figure 5. Configuration for 2-3/4" and 3" bolts.

3. Using a 5/8" socket with extension and combination wrench, bolt on the connecting beam to the cubes using two of the large 7/16" x 6" bolts, 7/16" washers, and 7/16" nuts, end cap washers and end caps. Figure 6 shows the connected cubes.

- Using a 5/8" socket and combination wrench, mount the 56" lat tops (part T from *HARDWARE* section) to the cells by inserting two of the large 7/16" by 6" bolts using the hardware configuration shown in Figure 7. Mount the 29" tricep top (part U in *HARDWARE* section) and adjustable crossover top (part V in *HARDWARE* section) to the frame and connecting beam (See Figure 6). You will need to remove the pulleys from the teardrop pulley assemblies to gain clearance for the socket wrench extension. Leave the pulleys out of the housings until the cables have been installed.

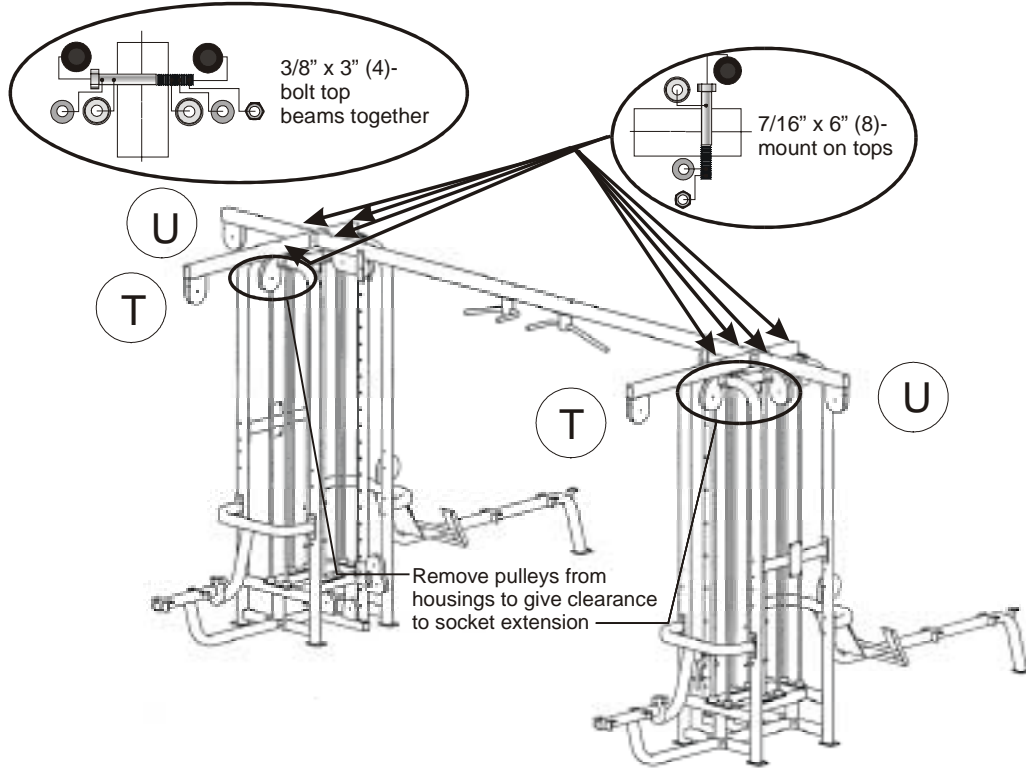


Figure 6. Mount lat tops and tricep tops.

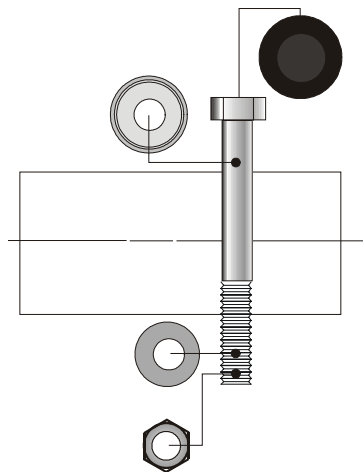


Figure 7. Configuration for 6" bolts.

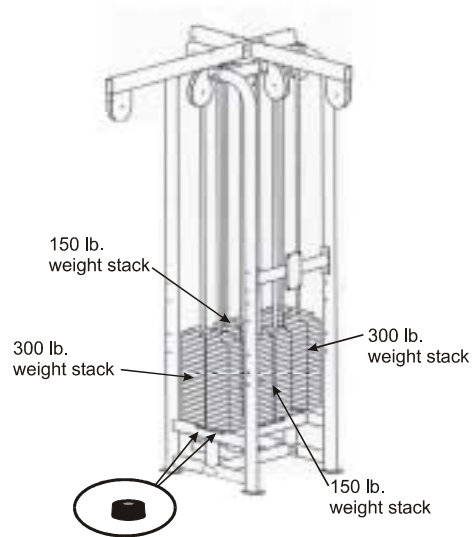


Figure 8. Mount rubber bumpers and the weight stacks.

5. Install the weight stacks. To do this:
 - A. Using a 9/16" socket and combination wrench, remove the tricep back rest bolts (see Figure 9).
 - B. Using a 9/16" socket and combination wrench, unbolt the top plate and remove the guide rods (see Figure 9).

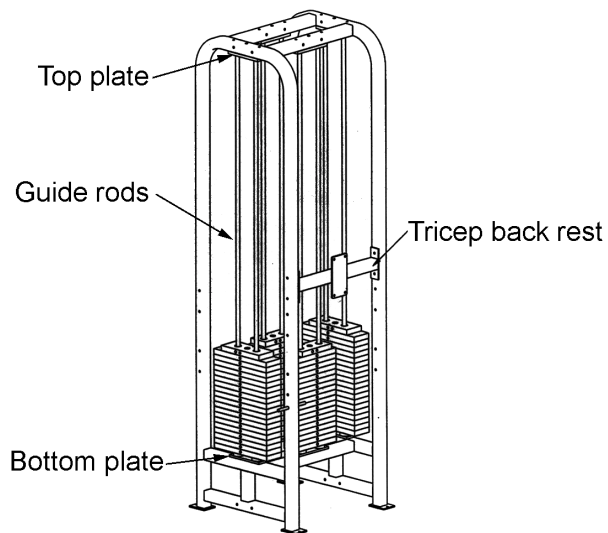
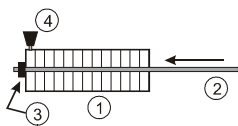
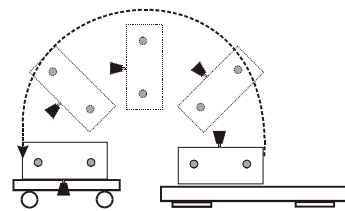
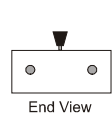


Figure 9. Remove the tricep back rest, the top plate and the guide rods.

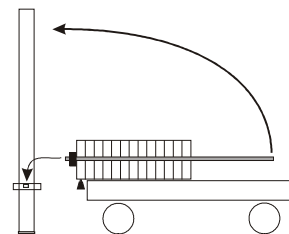
- C. **Prepare the weight stack.** Slide the guide rods (2) through the weight stacks (1) as shown below. Place rubber bumpers (3) on the bottoms of each guide rod. Make sure the pull pin (4) is in the bottom weight plate.
- D. **Flip over the weight stacks.** When shipped, the weight stacks have the pull pins facing upward. You will need to flip the stacks over so that the pull pins are facing outward when they are loaded onto the machine. Since the pull pins will be facing downward when they are flipped over, it is recommended that you put the stacks on a padded carpet to keep the pins from being damaged.
- E. **Set the weight stacks onto the machine.** Using a piano dolly, lift the weight stacks over the bottom plate and set the stacks onto the rubber bumpers with the plate numbers facing outward. The 300 lb weight stacks need to be facing the “sides” of the cells (where the benches will be attached). The 190 lb weight stacks will need to be facing the “outsides” and “insides” of the cells (where the tricep pulley adjustable pulleys will be attached). Make sure the pull pins are facing outward.



C. Prepare the weight stack-add bumpers to bottom, insert guide rods, put pull pin in bottom stack.



D. Flip over the weight stack onto piano dolly.



E. Hoist the weight stack onto the machine.

- F. With the top plate on the guide rods, bolt on the top plate to the top of the cells as shown in Figure 10 using a 9/16” socket and combination wrench and the 3” bolts (with cap washers) that were previously inserted.

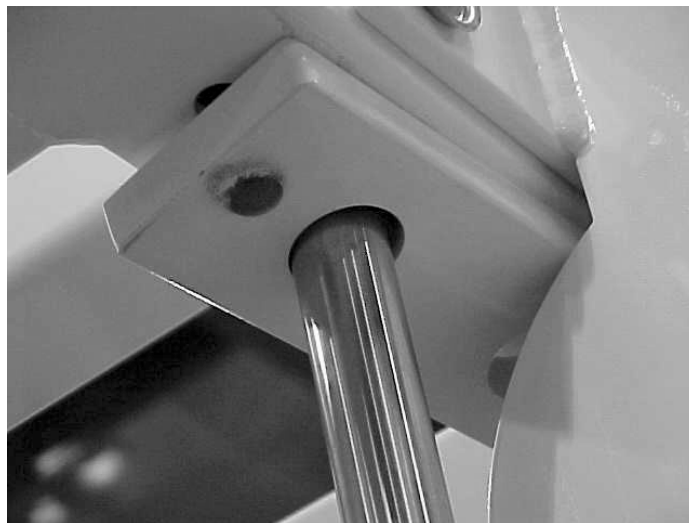


Figure 10. Bolt on the top plate.

- 6. Using a 7/8” combination wrench, bolt the floating pulleys into the 190 lb weight stacks (except for the tricep pushdown weight stacks- the one with the tricep back

rest mounted to the frame as shown in Figure 9). You will need to remove the pulley from the housing to thread the plug into the weight stack bayonet. Make sure the 9/16" jam nut is threaded 1-5/8" away from the pulley as shown in Figure 11. Leave the pulleys out since you will need to have them out when the cable is routed.

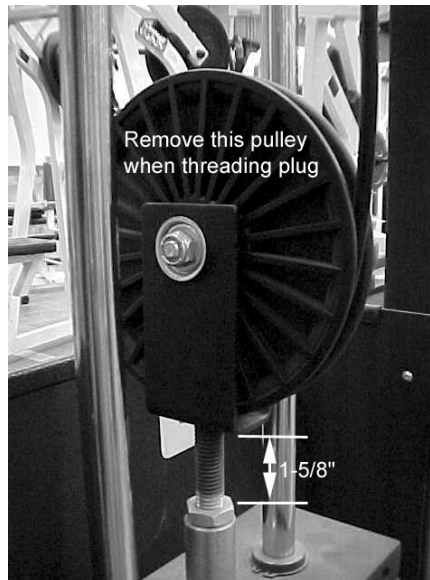


Figure 11. Bolt the floating pulleys into the 190 lb weight stacks.

7. Mount adjustable pulley brackets. When shipped, the adjustable pulley brackets look like the ones shown in Figure 12. The bolts need to be removed and the bracket needs to be positioned so that the top of the bracket is in the top hole as shown by the arrow in Figure 12. Use a 3" bolt with flat washers, end cap washers and end caps. When you remove the bolts, leave the pulley bolt and pulley out since you will need to thread the cable with the pulley removed.

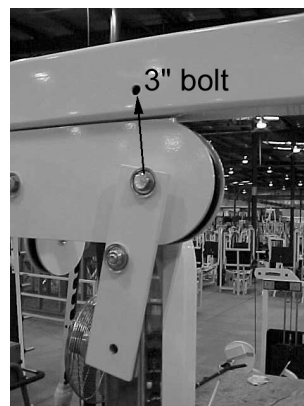


Figure 12. Mount adjustable pulley bracket.

8. Mount the seated row and lat benches to the frame. Using the bolts specified in Figure 13 and a 9/16" socket and combination wrenches, mount the benches as shown in Figures 13 and 14.

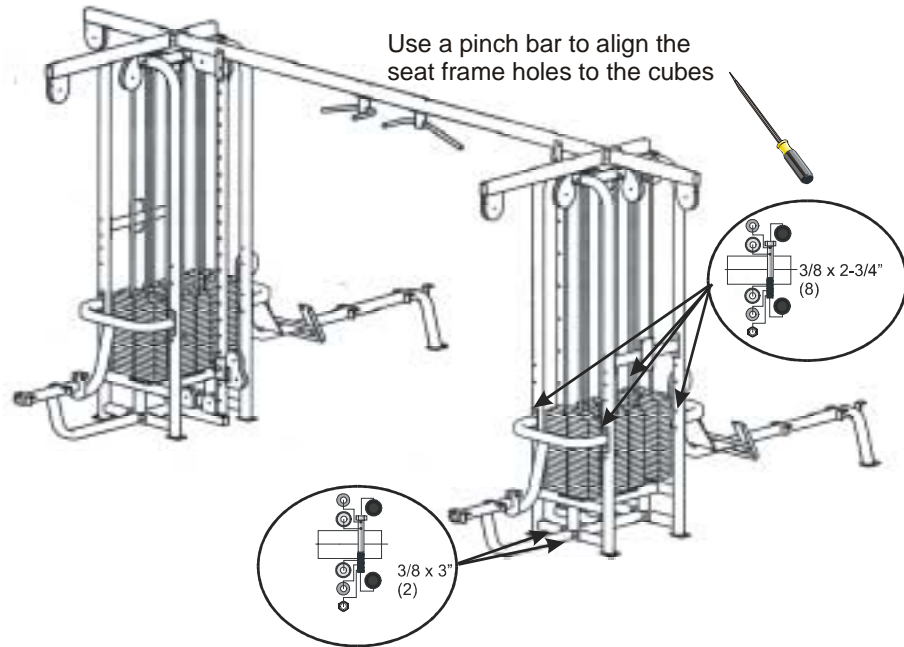


Figure 13. Mount the benches to the frame.

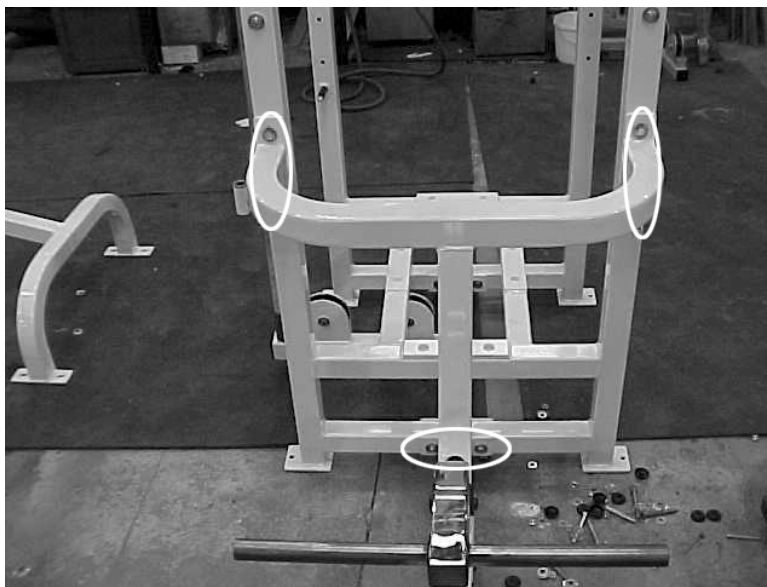


Figure 14. Bolt the benches to the frame.

INSTALLING THE CABLES

The SM81 uses eight cables. There are three different types of cable used on the SM81. They are:

1. Adjustable crossover cables (ball end cables) (2).
2. Low row cable (the long cables) (2).
3. Lat pulldown and tricep cables (4).

The lat and tricep cables can be identified by their short length, the low row cables can be identified by their long length and the adjustable crossover cables can be identified by the ball on the end of the cable. The routings for these cables are shown in Figures 15, 16, 17 and 18 below.

NOTE: YOU MUST REMOVE ALL PULLEYS TO ROUTE THE CABLES. USE A 9/16" COMBINATION WRENCH AND SOCKET TO DO THIS (SEE FIGURE 16). YOU MAY WISH TO REMOVE THE SHOULDER BOLTS (FIGURE 16 RIGHT SIDE) BY USING A 3/8" COMBINATION WRENCH AND A 1/8" HEX KEY WRENCH. WHEN YOU HAVE ROUTED THE CABLES, REPLACE ALL PULLEYS AND PLACE END CAPS ON NUT AND BOLT ENDS. YOU MAY NEED TO PRY THE PULLEY HOUSINGS OPEN TO REPLACE THE PULLEYS.

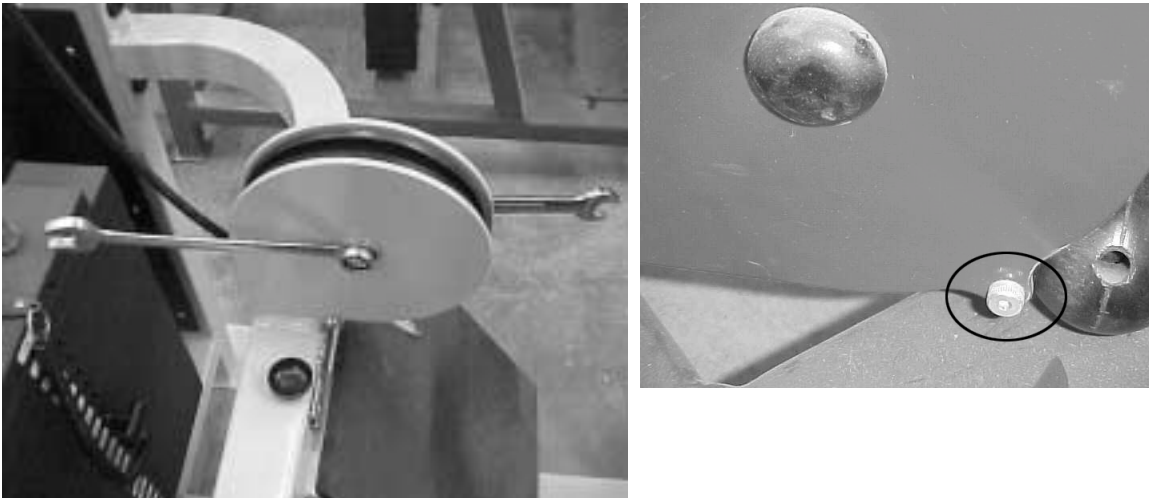


Figure 15. Removing the pulley bolts.

ADJUSTABLE CROSSOVER CABLE ROUTING

Once you've removed the pulleys as described previously, route the three adjustable crossover cables as shown in Figure 16.

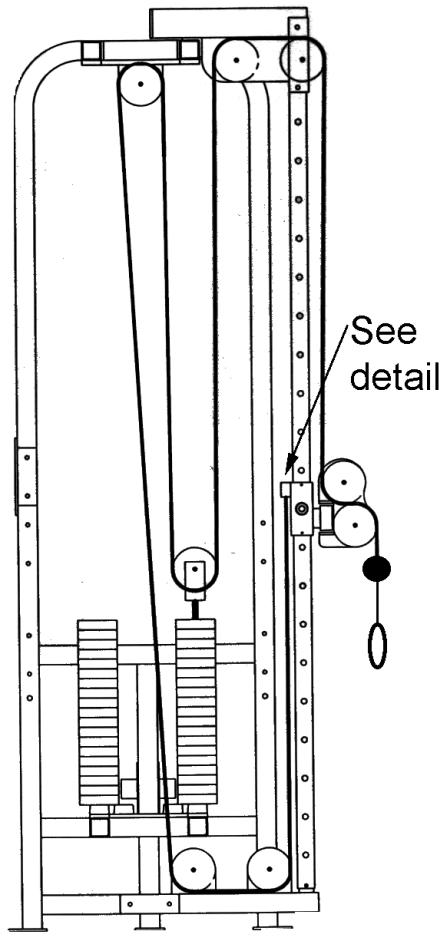


Figure 16. Adjustable crossover cable routing.

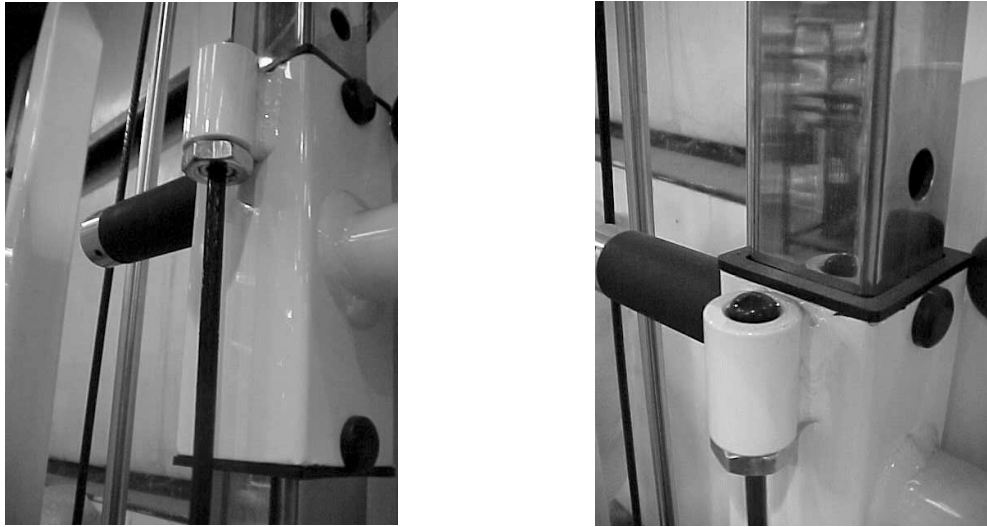


Figure 17. Adjustable crossover cable end detail.

Using a 7/8" wrench, tighten the jam nut onto the adjustable pulley threads as shown in Figure 17. Place a rubber cap on the top of the cable as shown in Figure 17 (right).

LOW ROW CABLE ROUTING

Route the low row cables as shown in Figure 18.

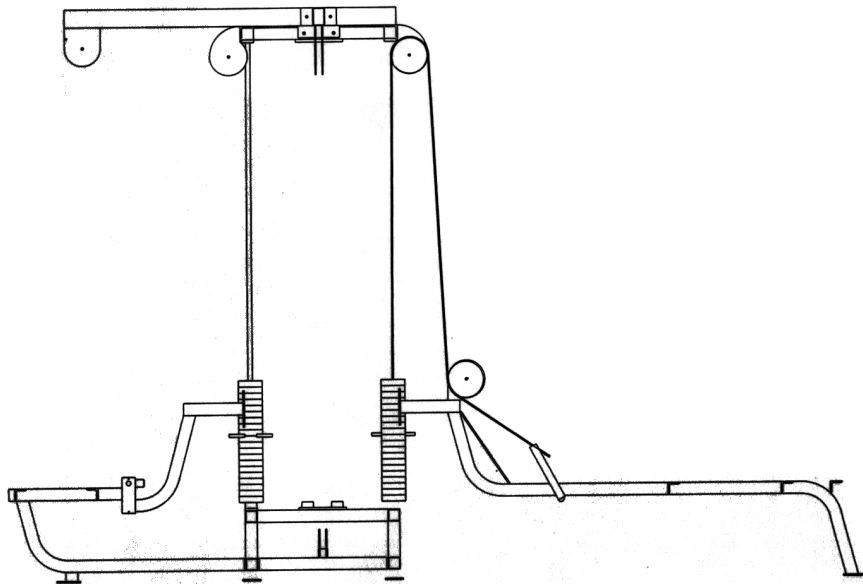


Figure 18. Low row cable routing.

Bolt the cable to the weight stacks as shown in Figure 19. Thread the 7/8" nut up on the cable bolt as shown at left. Screw the bolt down into the weight stack as shown at right. Tighten the bolt with a 7/8" combination wrench.

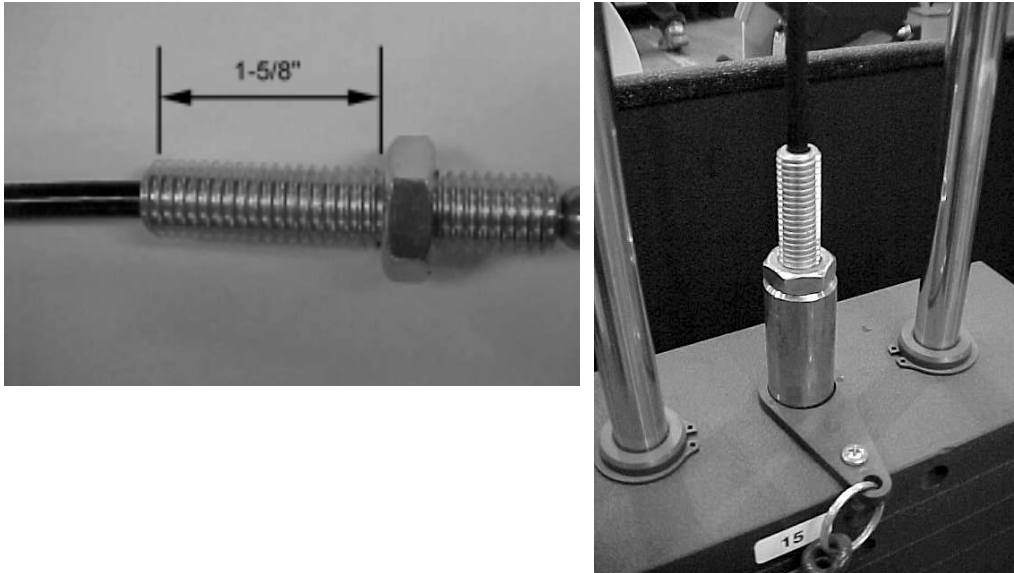


Figure 19. Screw the cable into the weight stack.

LAT PULLDOWN CABLE ROUTING

Route the lat pulldown cable as shown in Figure 20. Screw the cable into the weight stack as shown previously in Figure 19.

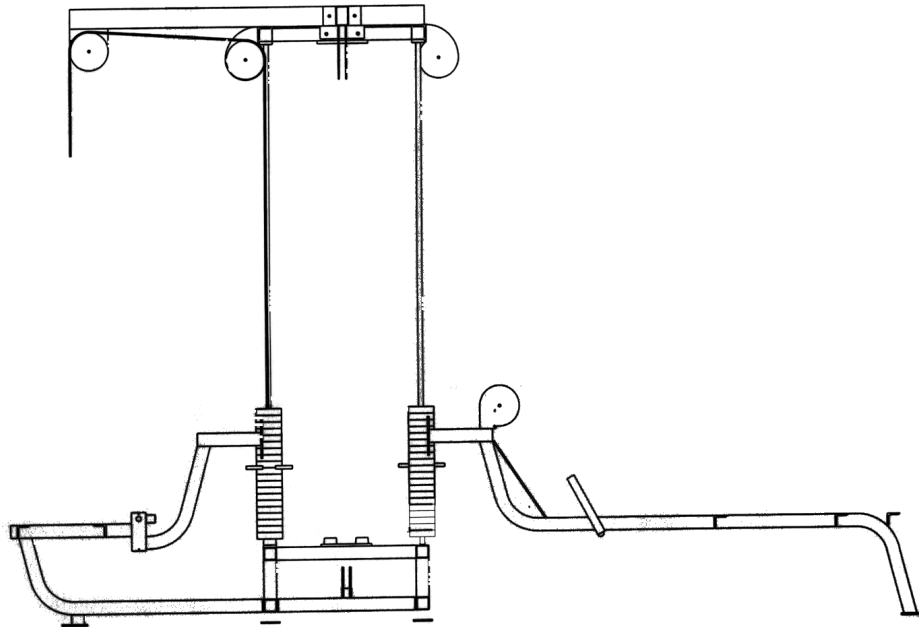


Figure 20. Lat pulldown cable routing.

TRICEP PUSHDOWN CABLE ROUTING

Route the tricep pushdown cable as shown in Figure 21. Screw the cable into the weight stack as shown previously in Figure 19.

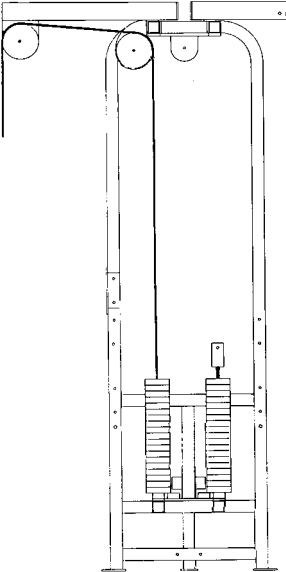
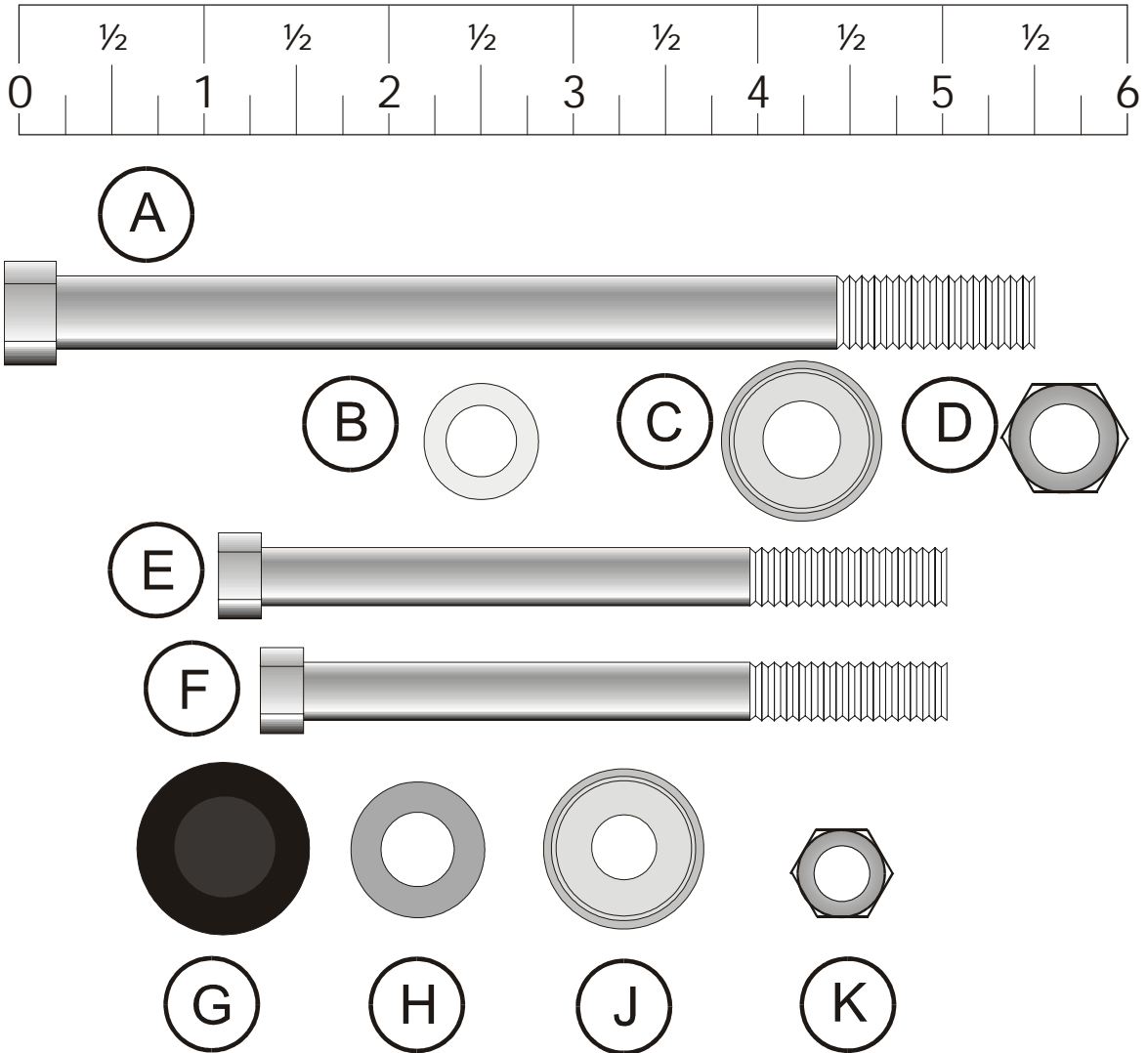


Figure 21. Tricep pushdown cable routing.

HARDWARE

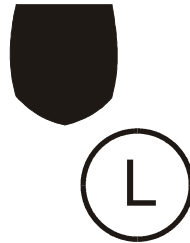


Hardware Figure 1. Assembly Parts.

The parts shown in Hardware Figure 1 are used to assemble the SM81. They are:

- A. 7/16" x 6" hex head bolt (used to bolt the tricep top beam, adjustable crossover top beam, lat top beams, and connecting beam to the tops of the cubes)
- B. 7/16" flat washer
- C. 7/16" cap washer (used on the head end of the 6" bolt so end cap will fit on the nut)
- D. 7/16" hex head nut
- E. 3/8" x 3" hex head bolt (used to bolt the cross beam to the cross members, the adjustable pulley tops to the top beams, and the bottom bolts on the lat benches)
- F. 3/8" x 2-3/4" hex head bolt (used for all other connections)
- G. End caps (bolt covers)
- H. 3/8" flat washer
- J. 3/8" end cap washers (end caps snap onto them)
- K. 3/8" Nyloc (locknut)

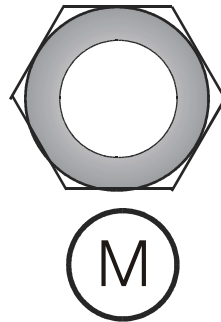
The black rubber caps shown in Hardware Figure 2 are used to cap the ends of the cables that are threaded to the adjustable pulleys.



Hardware Figure 2. Rubber caps.

- L. Rubber cap

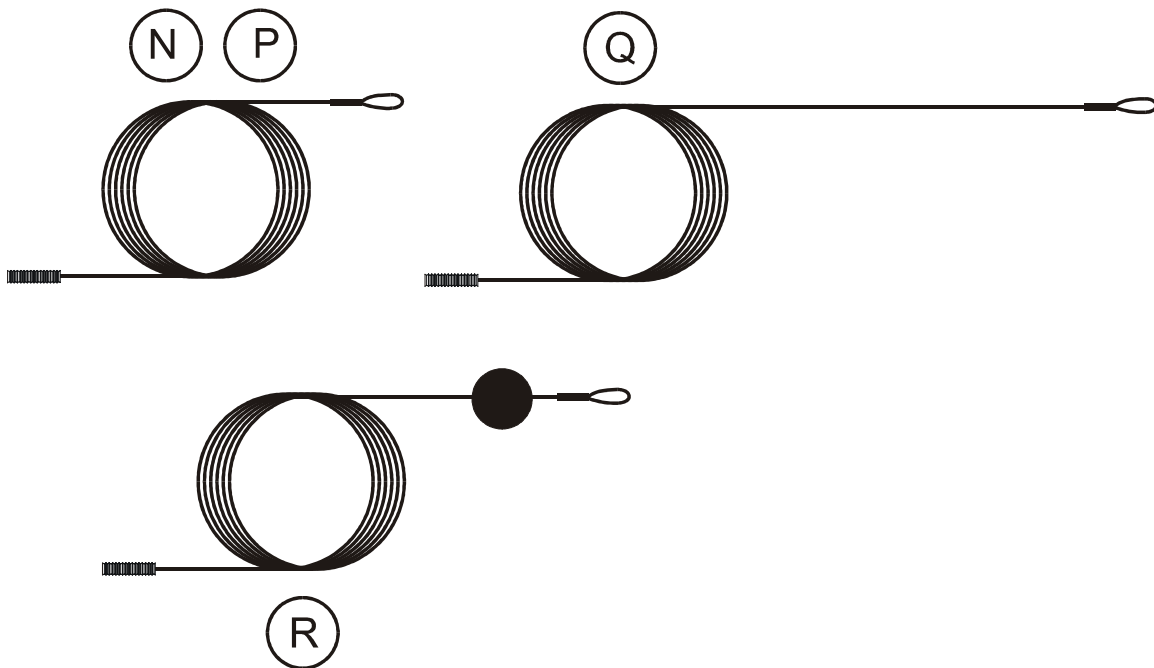
The part shown in Hardware Figure 3 is the 9/16" cable jam nut that's used to secure the cables to the weight stacks.



Hardware Figure 3. Cable jam nut.

M. Cable jam nut

Hardware Figure 4 shows the types of cables that are included with the SM81.



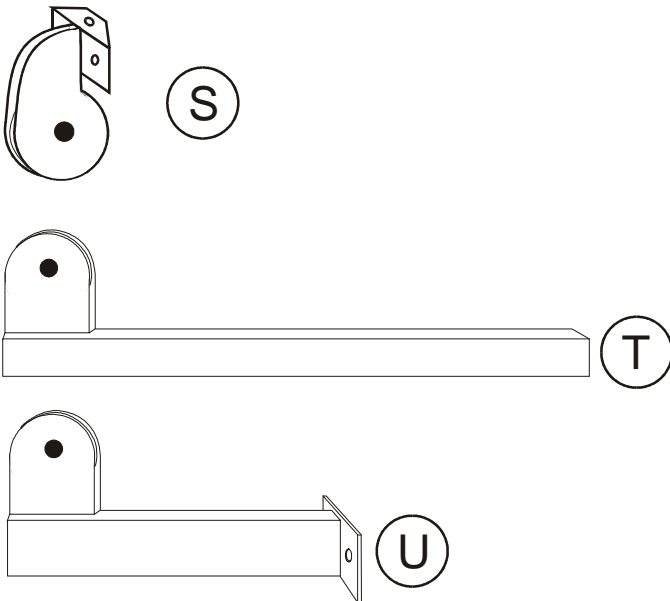
Hardware Figure 4. Cables.

N. Lat pulldown cables (same as tricep cable) (2)

P. Tricep cable (same as lat pulldown cable) (2)

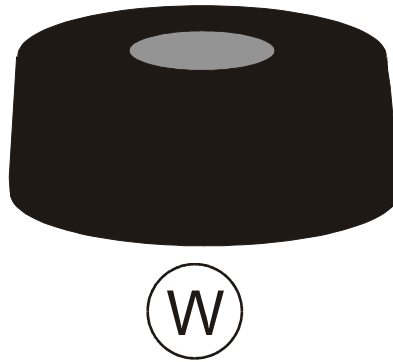
Q. Low row cables (long cables) (2)

R. Adjustable crossover cables (ball end) (2)



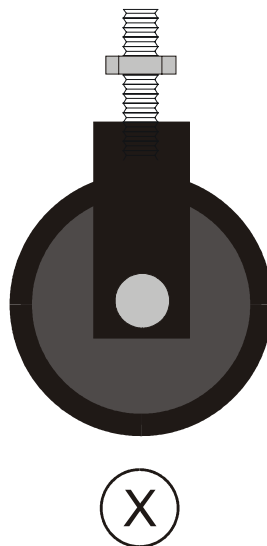
Hardware Figure 5. Top assemblies.

- S. Teardrop pulleys (bolt on above lat and seated row benches) (4)
- T. 56" Lat tops (bolt to top of cells with pulleys above lat benches) (2)
- U. 29" Tricep top (bolt on to 56" lat top bar) (2)



Hardware Figure 6. Weight stack rubber bumpers.

W. Weight stack rubber bumpers (inserted under weight stacks) (16)



Hardware Figure 7. Floating pulleys.

X. Floating pulleys (bolt to 190 lb weight stacks other than tricep pushdown stack) (2)

PARTS LIST

Part #	ID	Description	Quantity
	Main components		
	1	Cubes	2
	2	Low row bench	2
	3	Lat bench	2
	4	Connecting beam	1
	5	Lat tops	2
	6	Tricep top	2
	7	300 lb weight stack	4
	8	190 lb weight stack	4
	Cables, caps & nuts		
0017-00042-0936	L	Rubber cap	2
0017-00103-0234	M	Cable jam nut	12
0017-00101-1408	N	Lat pulldown cable	2
0017-00101-1408	P	Tricep cable	2
0017-00101-1422	Q	Low row cable	2
0017-00101-1561	R	Adjustable crossover cable	2
	6" bolt hardware		
0017-00101-1561	A	7/16" x 6" hex head bolt	8
0017-00104-0363	B	7/16" flat washer	8
0017-00104-0366	C	7/16" cap washer	8
0017-00103-0233	D	7/16" Nyloc nut	8
	2-3/4" & 3" bolt hardware		
0017-00101-1422	E	3/8" x 3" hex head bolt	10
0017-00101-1408	F	3/8" x 2-3/4" hex head bolt	24
0017-00042-0969	G	End cap	68
0017-00104-0313	H	3/8" flat washer	68
0017-00104-0368	J	3/8" end cap washer	68
0017-00103-0217	K	3/8" Nyloc nut	34
	Pulleys and bumpers		
0017-00042-0993	W	Weight stack rubber bumper	16
	X	Floating pulley	2
	Handle and bar hardware		
		Safety carabiner	8
		Crossover handle	2
		Tricep bar	2
		Lat bar	2
		Low row handle	2
		Leg strap	1

<p>0017-00101-1413 0017-00104-0368 0017-00103-0217</p>	<p>Pulley hardware (installed)</p>	<p>1-3/4" Bolt Cap washer 3/8" Nyloc nut</p>	
<p>0017-00101-1413 0017-00104-0313 0017-00103-0217</p>	<p>Floating pulley hardware (installed)</p>	<p>1-3/4" Bolt Flat washer 3/8" Nyloc nut</p>	